

REMARKS/ARGUMENTS

Claims 1, 2, 4, 6, and 8 are currently pending in this application.

Claim 1 has been amended to clarify that the first input to the logical reduction means is from the reordering means. Claim 6 has been amended to correct a typographical error, to change "ordering means" to "reordering means".

Claim Rejections - 35 USC §103(a)

Claims 1, 2, 4, 6, and 8 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,115,410 to Naruse (hereinafter "Naruse"), in view of U.S. Patent No. 6,798,737 to Dabak et al. (hereinafter "Dabak").

Naruse relates to a Walsh code generator, including a binary counter, a parallel generation controller, and a Walsh code parallel generator. The counter controls the position of an output bit in the Walsh code. The parallel generation controller controls an upper portion of the Walsh code, and the Walsh code parallel generator controls a lower portion of the Walsh code. The parallel generator controller includes a plurality of AND gates, the outputs of the AND gates being connected to a plurality of XOR gates. (See Figures 3-4 and column 5, lines 26-67.)

Dabak relates to a method of performing a Walsh-Hadamard transform for forward link multiuser detection in CDMA. Specifically, Dabak teaches using an Inverse Fast Walsh Transform (IFWT) for despreading and a Fast Walsh Transform (FWT) for resspreading (column 3, lines 22-29). Dabak does not teach generating the Walsh codes.

Pending claims 1 and 4 teach the generation of Orthogonal Variable Spreading Factor (OVSF) codes including reordering the bits from least significant bit to most significant bit. The Examiner has cited Dabak, column 4, lines 52-66 as teaching this element; however, the Applicant respectfully disagrees. Dabak states at column 4, lines 59-64 (emphasis added):

For the Walsh codes with lower spreading factors, the inputs which use the same Walsh code must be in bit-reversed order of the indices as demonstrated by x4, x5, x6 and x7 in FIG. 3. This is the standard bit-reversed order which is used in most fast transforms such as the Fast Fourier Transform (FFT).

The cited section refers to the “inputs which use the same Walsh code” being in bit-reversed order, and not to the generation of the Walsh code itself utilizing an input in bit-reversed order. In order to perform an IFWT or a FWT, the applicable Walsh code must already be determined.

The present invention is related to generating OVSF codes which may then be used in a transform similar to the FWT. Dabak does not teach or suggest any of the elements of the present invention simply because it relates to performing

operations on Walsh codes, and not generating the codes themselves. Therefore, there is no motivation to combine the teachings of Naruse and the teachings of Dabak. The combination of Naruse and Dabak does not teach or suggest all of the elements of claims 1 and 4.

Pending claims 2 and 6 contains the reverse step, reordering the bits from most significant bit to least significant bit. As explained above, neither Naruse nor Dabak teach reordering the bits in this manner.

Based on the arguments presented above, withdrawal of the §103(a) rejection of claims 1, 2, 4, 6, and 8 is respectfully requested.

Conclusion

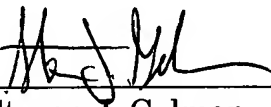
If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephone interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

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Application No.: 10/046,601

In view of the foregoing amendments and remarks, Applicant respectfully submits that the present application, including claims 1, 2, 4, 6, and 8, is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

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